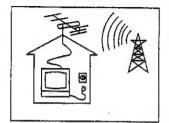
Panasonic Operating Instruction

Colour Television TC-51PM10ZQ

Dear Panasonic customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new colour television.

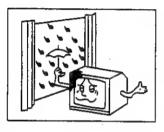
Safety Instructions



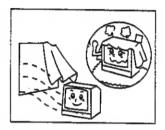
The TV set can be operated on AC AUTO 110-240V, 50/60Hz.



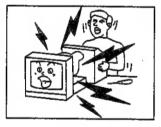
The cabinet and picture tube can be kept in good condition by simply wiping with a clean, soft cloth moistened with mild detergent and water. Do not use solutions containing benzol, petroleum or a chemical cloth. For safety, remove the plug from the wall outlet.



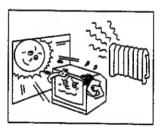
To prevent damage which may result in fire or electrical shock, do not expose the TV set to rain or excessive moisture.



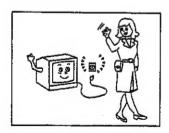
Adequate ventilation is essential to prevent failure of electrical components.



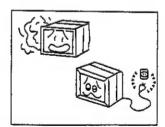
Do not remove the rear cover, as live parts are accessible when it is removed.



Avoid exposing the TV set to direct sunlight and other source of heat.



Remove the plug from the wall outlet (Power point) when the TV set is not used for a prolonged period of time.

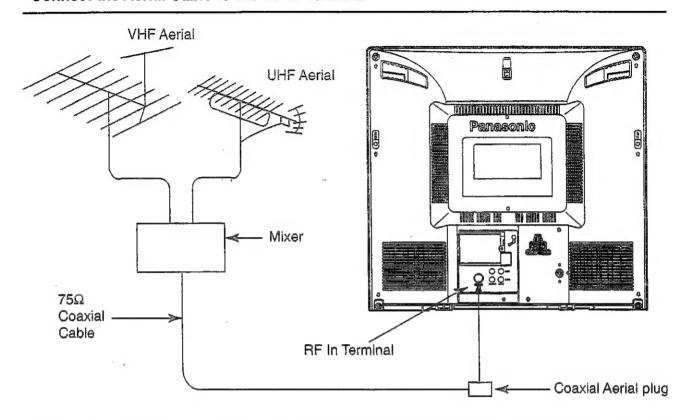


Do not use this set if abnormal operation occurs.

EX: smoke, odd sounds or smells, turn the power switch off and disconnect the AC power if you notice any unusual operation.

Before Operating This Set

Connect the Aerial Cable to the RF In Terminal



To obtain the best quality picture and sound, an external antenna, the correct cables (75 Ohm coaxial) and the correct terminating plug will be required.

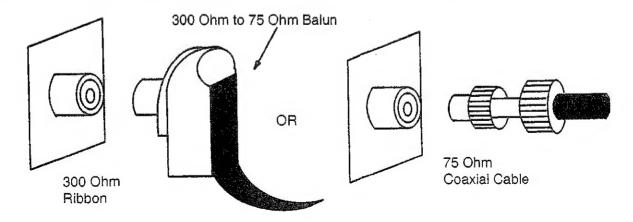
If a communal antenna system is used, you may require the correct connection cable and plugs between the wall antenna socket and your television receiver.

Your local Television Service Dealer may be able to assist you in obtaining the correct antenna system for your particular area and accessories required.

Any matters about antenna installation, upgrading of existing systems or accessories required, and the cost incurred, are the responsibility of the customer.

Note:

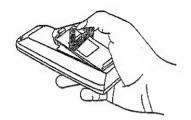
If your existing antenna system uses 300 Ohm to 75 Ohm Balun, see Below.



Before Operating This Set

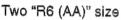
Battery Installation

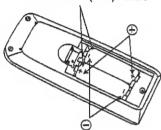
-



Open the cover.

Push bottom downward and pull out the cover.



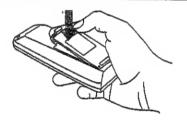


Batteries: Use two "R6 (AA)" size batteries.

Insert the batteries ensuring correct polarity.

This is identifiable by the "+" and "-" symbols on both the batteries and inside the battery compartment.

3



Replace the cover.

Do not use rechargeable (Ni-Cd) batteries.

They are different in shape and performance and may fail to ensure correct operation.

△ Battery cautions

The incorrect use of batteries can cause electrolyte leakage which will corrode the Remote Control or cause the batteries to burst.

Old Batteries

New Batteries







Replacement both batteries at the same time.

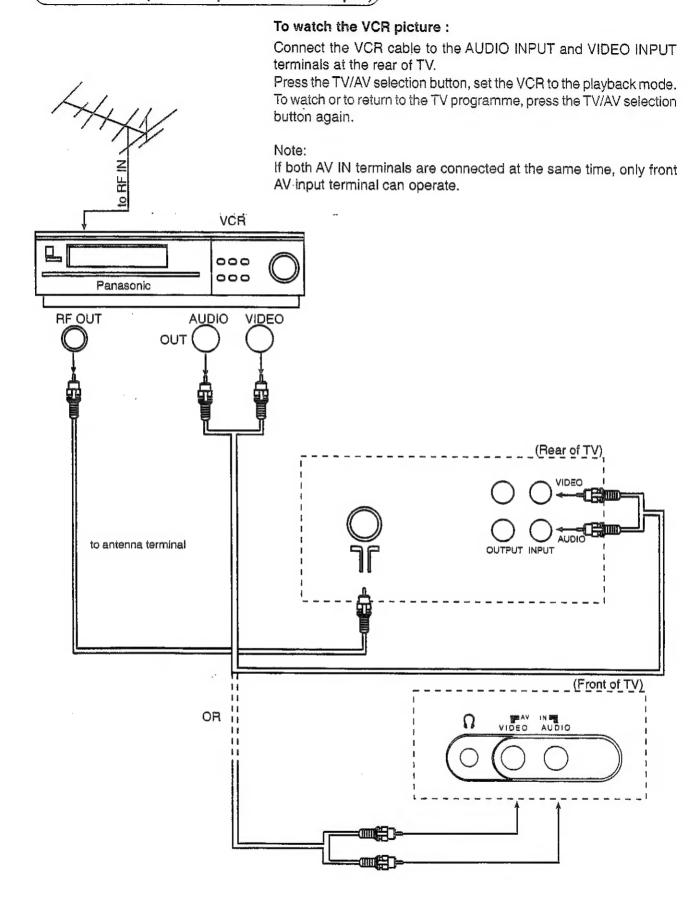


Don't mix battery types (alkaline with carbon zinc. etc.)



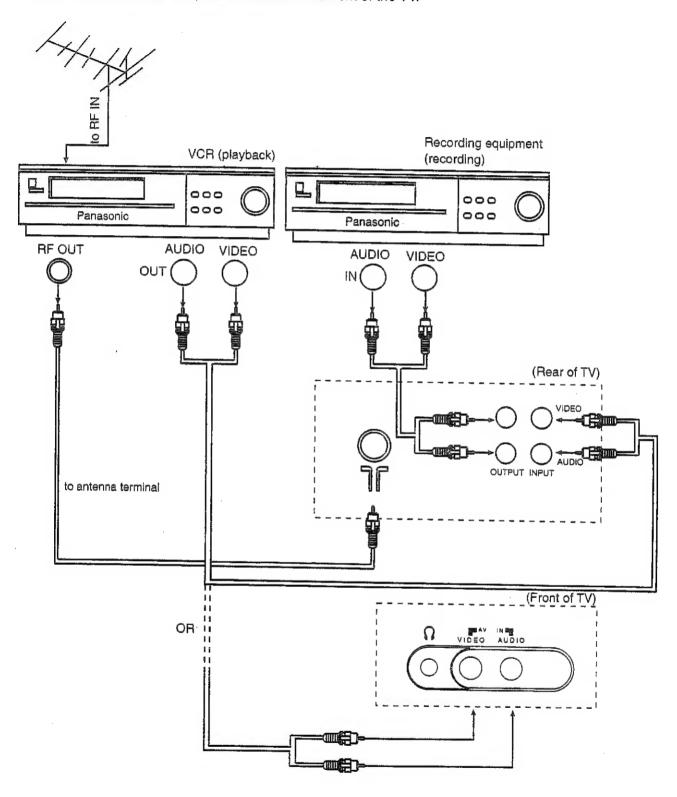
Don't Recharge.

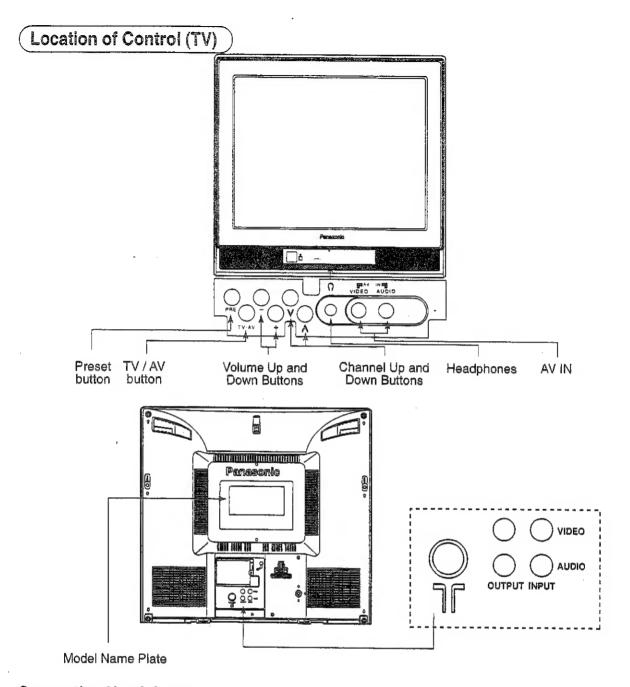
Connections (Audio Input and Video Input)



Recording

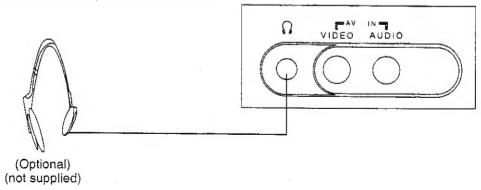
Follow the connection shown below when you want to copy a programme from another tape (VCR). You can either use the AV input at the back or the front of the TV.





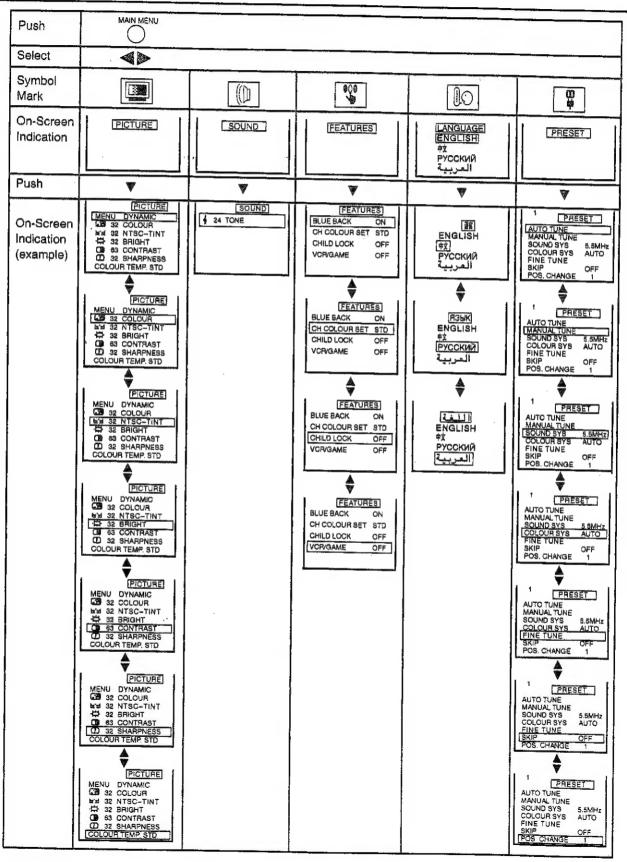
Connecting Headphones

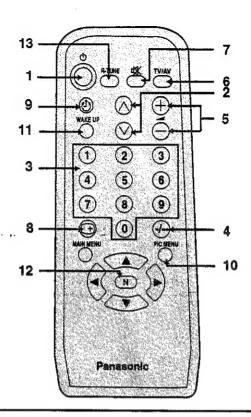
When a headphones plug is inserted into the Headphones socket all speakers will be automatically disconnected; only the Headphones will function.



Flow Chart of Main Menu

When the "MAIN MENU" button is pushed at the main menu screen, the screen display will return to the normal viewing condition. When the "MAIN MENU" button is pushed at each MENU screen (Picture, Sound, Features, Language, Preset), the screen display will return to the Main Menu screen.





1.

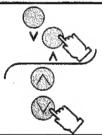


To Switch Power on/off

The TV set must be switched on at the wall outlet and at the Main power switch. Press this button to turn the TV set ON, from stand-by mode. Press it again to turn off. **Note:**

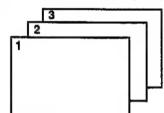
When in the stand-by condition, it is possible to turn the TV set on by pushing the Direct Programme Number Selection button (0-9) or the Programme Number up and Down button.

2.



Programme Number Selection

Press the programme number Up " a" or down " v " Button to select the next higher or lower programme number.



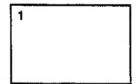
3.



Direct Programme Number Selection

(0 - 9)

e. g. To select programme number "1", press the "1" button.



4.



Two Digit Programme Number Selection

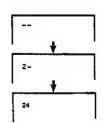
e.g. To select Programme Number "24".

Push the 🗇 button.

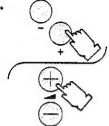
Push the 2 button.

Push the 4 button.

Setting range 0 ~ 99

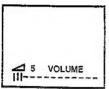


5.

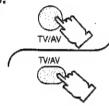


Volume Adjustment

Push the Volume Up or Down button to increase or decrease the sound volume level.

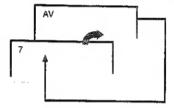


6.



TV / AV Selection

Push the ".T.V/AV " button to select TV and AV input signal modes sequentially.



7.



Sound Mute Button

Push this button to mute the Sound completely.

Push the button once again to restore the previous sound level, and cancel the mute.



The " Mute " symbol will appear. (Colour changes to Red)

5 VOLUME

8.



Recall Button

Push the RECALL button to display the current system status. Press this button until display is cancelled.

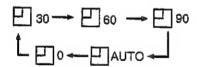
9.

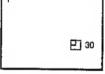


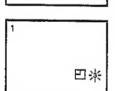
Off Timer Button

The TV set may be preset to switch to stand-by after a fixed period.

By pressing "Off-Timer" button, you can select the preset time either 30, 60, or 90 minutes.







When the off-timer reaches its last 3 minutes, it starts blinking before going to stand-by condition.

Note:

Setting Off-timer to AUTO mode. If the set is not switched off, when the TV station ends broadcasting, it will automatically go to the stand-by condition after 5 minutes. This AUTO mode will not operate when the TV receiver is in AV mode.

How to cancel the OFF-timer setting:

- 1. Set the preset time condition to "0" mode by pressing the Off -timer button.
- 2. Turning the TV set off.

10.

PIC MENU

Picture Menu Operation

By pressing the PICTURE MENU button, you can sequentially select the Picture menus as shown below:

On-screen	Function	
MENU DYNAMIC	For watching in brighter environments. This menu selects a higher than normal level of contrast.	
MENU STANDARD	For watching in normal (evening) environments. This menu selects normal level of contrast.	
MENU SOFT	For watching in dark environments. This menu selects reduced level of contrast.	

11.

WAKE UP

Wake Up Timer Button

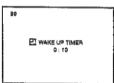
- 1. Press the "WAKE UP TIMER" button.
- Press the position left or right button to select the wake up timer. (Wake up timer will increase or decrease by 10 minutes when left or right button is pressed.)

E) WAKE UP TIMER OFF

Note:

Wake up time can be set up to 12 hours.

- After setting the wake up timer, switch the TV set to standby mode. (LED light will blink ON and OFF during standby mode)
- When the time Wake Up timer has elapsed in the set will automatically switch on. (Press any button to cancel the Wake Up timer on screen display.)





Note:

- i) After the Wake Up time is set and the TV mode is still not switched off, the Wake Up timer will continue to count down until the timer is off.
- ii) When Wake Up timer switch ON the TV set, the off timer is set to 90 minutes mode automatically. Press any button to cancel the off-timer. If no button is pressed, the TV set will switch off automatically after 90 minutes.
- To cancel the Wake Up timer. You can choose any of the following:
- i) Switch off the main power.
- ii) Press the position left or right button, until OFF is reached.
- iii) Press the NORMALIZE button when Wake Up timer OSD is displayed.

12.



Normal (N) Button

By pushing the Normal "N" button on the Remote Control while Picture or Sound Control Function is displayed, the selected function will be changed to the Normal Mode. Normalization will not occur if the function is not displayed when the "N" button is pushed. The Normal mode is the factory preset condition. Returning to this original condition is called "Normalization".

13. R-TUNE



Rapid Tune Button

Push the button to access previously viewed channel.

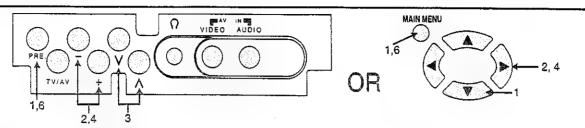
PRESENT CHANNEL BEING VIEWED







Automatic Tune





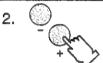
Press the "PRE" (PRESET) button, until "AUTO TUNE" function is selected.



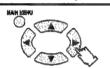
Channel Number Automatic Tune condition.



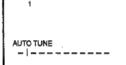
Press the "MAIN MENU" and "Position" buttons, until "AUTO TUNE" function is selected.



Press the Volume Up " + " or Down " - " button.

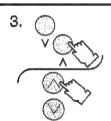


Press the Position Right button.

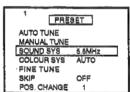


Search start.

The best tuning position is automatically memorized.

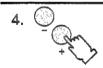


After all stations are tuned, the onscreen display will automatically change form "AUTO TUNE" to "SOUND SYS" Position. Confirm the sound condition of each Programme Number by using the Programme Number Up "A" Button.



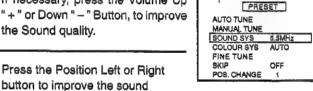
If the Sound is not clear or no sound is produced on a Programme Number, then follow the next Step 4.

When sound volume is too small to confirm, turn it up by using the sound volume button on the remote control

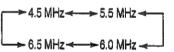


If necessary, press the Volume Up "+" or Down "-" Button, to improve the Sound quality.

quality.



The sound indicator will change as follows:

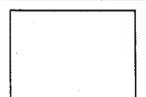


5.

Use the Programme Number Up "A" button to sequentially check each station. If necessary repeat step 3 to 4 for each Programme Number.



Press the "PRE" (PRESET) button 5 times.

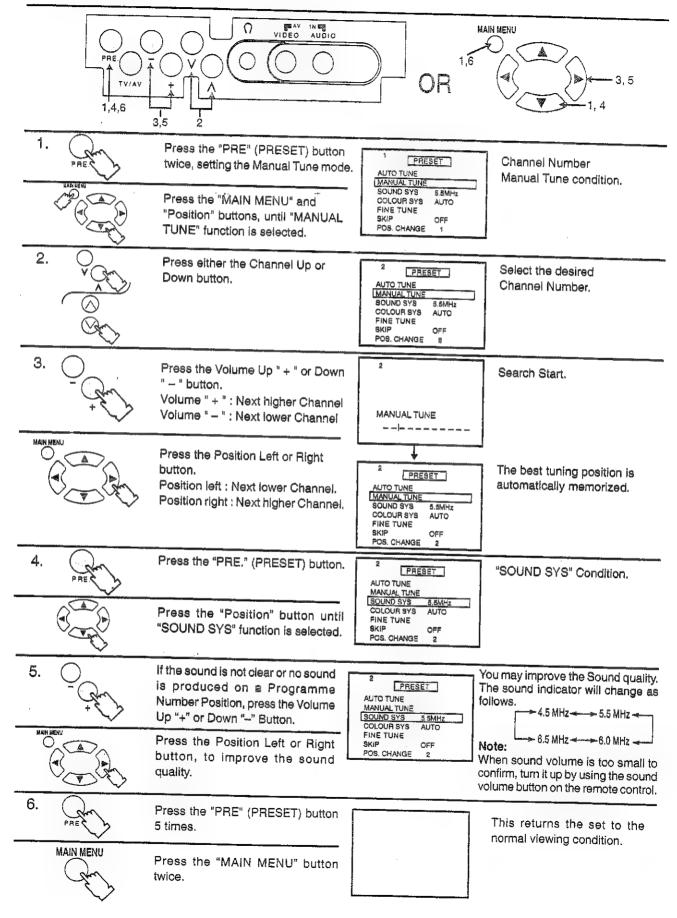


This returns the set to the normal viewing condition.

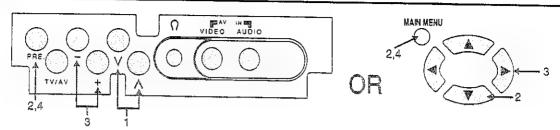


After all stations are tuned, press the "MAIN MENU" button twice.

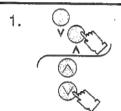
Manual Tune



Fine Tune



Under normal reception condition, this function is not used. However, in areas of poor reception or constant interference, a slight adjustment on the fine tuning can improve the picture and sound quality.



Select the channel which you want to try to improve, using the Channel Up or Down buttons.

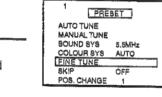


Select the desired Channel Number.

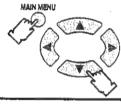




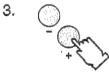
Press the "PRE." (PRESET) buttons 5 times, setting the Preset Menu to "Fine Tune".



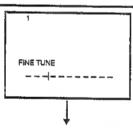
Fine Tune condition.



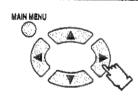
Press the "MAIN MENU" and "Position" buttons, until "FINE TUNE" is selected.



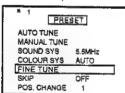
Press the Volume Up " + " or Down " - " button until the clear picture is received.



Fine Tune Start.



Press the Position Left or Right button until the clear picture is received.



The AFC function is deactivated. The " • " symbol appears to the left of the Channel Number.

4



Press the "PRE" (PRESET) button 3 times.

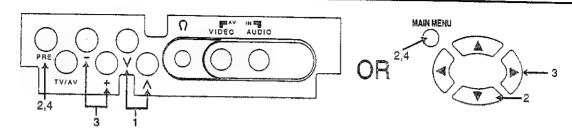


This returns the set to the normal viewing condition.

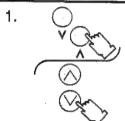


After all stations are tuned, press the "MAIN MENU" button twice.

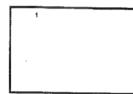
How to cancel the Fine Tuning



Cancelling previously adjusted (manually) fine tuning, means reactivating the AFC (Automatic Frequency Control) Function, also known as AFT (Automatic Frequency Tuning). Reactivating the Automatic Fine Tuning means allowing the set to automatically tune optimum tuning position, for that Channel Number.



Select the "AFC OFF" Channel Number which you want to return to Automatic Frequency Control (Cancel the manual fine tuning).

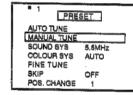


"AFC OFF" Channel Numbers are indicated to you by the " a " symbol to the left of the Channel Number.

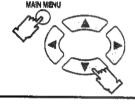




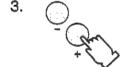
Press the "PRE." (PRESET) buttons twice, setting the Preset Menu to set to "MANUAL TUNE" mode.



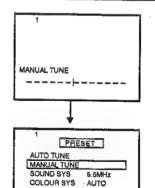
Manual Tune condition.



Press the "MAIN MENU" and "Position" buttons, until "MANUAL TUNE" function is selected.

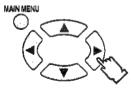


Press the Volume Up " + " or Down " - " button briefly.

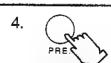


AUTO

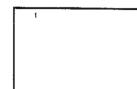
The best tuning position is automatically memorized.



Press the Position Left or Right button briefly.



Press the "PRE" (PRESET) button E times.



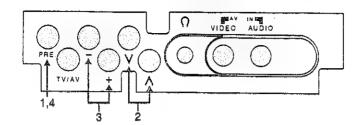
FINE TUNE POS, CHANGE

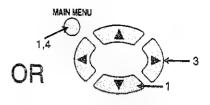
> This returns the set to the normal viewing condition.



Press the "MAIN MENU" button twice.

How to Skip Programme Number





1.

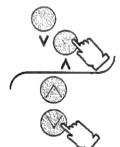
Press the "PRE." (PRESET) button B times, setting the Preset Menu to "SKIP".

PRESET AUTO TUNE SOUND SYS AUTO FINE TUNE SKIP POS. CHANGE

Channel Skip condition.

Press the "MAIN MENU" and "Position" buttons, until the Preset Menu to "SKIP".

2.



Select a Programme Number you want to skip, by pushing the Channel number Up or Down buttons.

PRESET AUTO TUNE MANUAL TUNE BOUND SYS 5.5MHz AUTO COLOUR SYS FINE TUNE

3.



Press the Volume Up " + " or Down " - " button.

MAIN MENU

Press the Position Left or Right button.

PRESET AUTO TUNE SOUND SYS AUTO

FINE TUNE

The displayed "OFF" condition changes to "ON".



Press the "PRE" button 2 times.

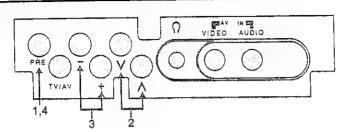
This returns the set to the normal viewing condition.

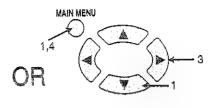
MAIN MENU



Press the "MAIN MENU" button twice.

How to Cancel the Skip Function



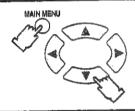


1. Quy

Press the "PRE." (PRESET) buttons 6 times, setting the Preset Menu to "SKIP".

PRESET
AUTO TUNE
MANUAL TUNE
SOUND SYS 5.5MMz
COLOUR SYS AUTO
FINE TUNE

SKIP POS. CHANGE Channel Skip condition.



Press the "MAIN MENU" and "Position" buttons, until "SKIP" is selected.

2.

Select the skipped Programme Number, by pressing the Channel Number Up or Down buttons.

PRESET
AUTO TUNE
MANUAL TUNE

MANUAL TUNE SOUND SYS 5.5MHz COLOUR SYS AUTO FINE TUNE

3.



Press the Volume Up " ÷ " or Down

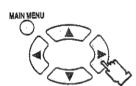
" -- " button.

PRESET

POS, CHANGE

AUTO TUNE
MANUAL TUNE
SOUND BYS 5.5MH2
COLOUR SYS AUTO
FINE TUNE

The displayed "ON" condition changes to "OFF".



button.

Press the Position Left or Right

Repeat step 2 and 3, if you wish to cancel the Skip function on any other programme number.

4.



After the Skip Cancel operation is completed, press the "PRE" button twice.

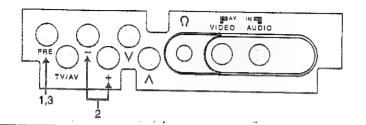
This returns the set to the normal viewing condition.

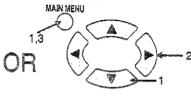


After the Skip Cancel Operation is completed, press the "MAIN MENU" button twice.

Colour System Selection

Use this function if a clear picture with weak colour is obtained when a Broadcast or AV signal is received.





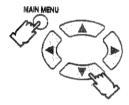
1.



Press the " PRE." (PRESET) button 4 times.

PRESET AUTO TUNE MANUAL TUNE SOUND SYS COLOUR SYS FINE TUNE POS. CHANGE

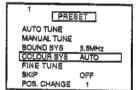
Colour System condition.



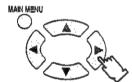
Press the "MAIN MENU" and "Position" buttons, until "COLOUR SYS" is selected.



Press the Volume Up " + " or Down button, " - " repeatedly until the optimum image is produced.



The Colour system will change as shown:



Press the Position Left or Right button repeatedly until the optimum image is obtained.



3.



Press the "PRE" (PRESET) button 4 times.

This returns the set to the normal viewing condition.

This selected Colour System is automatically memorized.

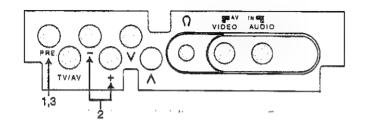


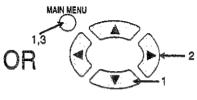


Press the "MAIN MENU" button twice.

Sound System Selection

This function is used only in the TV mode, and is not applicable in AV mode. When the sound is not clear or no sound is produced on a channel.

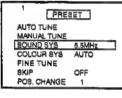




Press the "PRE." (PRESET) button 3 times.

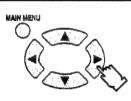


Press the "MAIN MENU" and "Position" buttons, until "SOUND SYS" is selected.

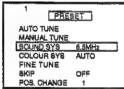


Sound System condition.

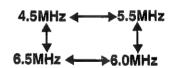
Press the Volume Up " + " or Down button " - " repeatedly until the optimum sound is obtained.



Press the Position Left or Right button repeatedly until the optimum sound is obtained.



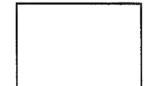
The Sound system will change as shown:



3.



Press the "PRE" (PRESET) button 5 times.



This returns the set to the normal viewing condition.

This selected Sound System is automatically memorized.

MAIN MENU



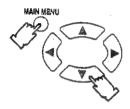
Press the "MAIN MENU" button twice.

Pos. Change

This feature will enable the user to swap (Exchange) channel memory of 2 selected channels. The position change function allows one to shift from the present channel to any programme number without any tuning process.

1.

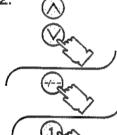
Press the "PRE." PRESET button 7 times.



Press the "MAIN MENU" and "Position" buttons, until "POS. CHANGE" is selected.

PRESET AUTO TUNE MANUAL TUNE SOUND SYS 5.5MHz AUTO FINE TUNE POS. CHANGE

2.



Select a Programme number you want to change by pushing either Channel UP or DOWN button, two digit programme selection or Direct Programme number selection on the remote

(Position change will only exist in preset mode).

PRESET

AUTO TUNE MANUAL TUNE BOUND SYS 5.5MHz AUTO FINE TUNE SKIP POS. CHANGE

Note:

Position change also can operated using panel key. Use PRESET key to enter POSITION CHANGE, then, use volume up/ down to change the channel to be swapped to. Use TV/AV to confirm.

3.



Press the "TV/AV" button to confirm.





Press the "PRE." (PRESET) button once.

PRESET **AUTO TUNE** MANUAL TUNE 5.5MHz SOUND SYS COLOUR SYS AUTO FINE TUNE

POS. CHANGE

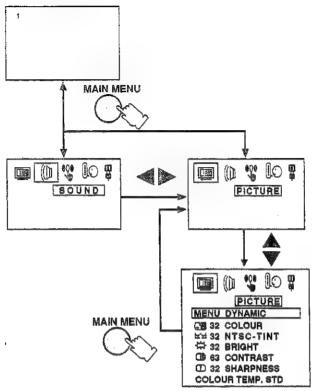
This returns the set to the normal viewing condition.





Press the "MAIN MENU" button twice.

Picture Menu Operation



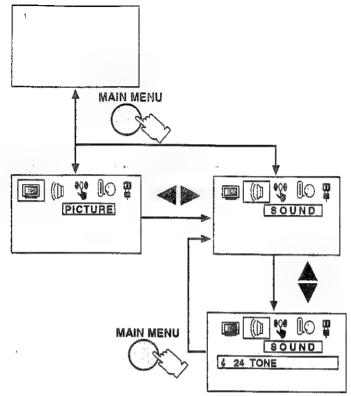
Picture Menu

Push	Item	Effect	Indicator
Select	MENU DYNAMIC	→ MENU DYNAMIC ←→ MENU STANDARD ← MENU SOFT ←	MENU DYNAMIC
Select	COLOUR	⋖ ► Less More	32 COLOUR
Select	NTSC-TINT	Greenish Reddish	▷°≥ 32 NTSC-TINT
Select	BRIGHT	⋖ ▶ Darker Brighter	. 32 вяюнт
Select	CONTRAST	Less More	63 CONTRAST
Select	SHARPNESS	Less More	① 32 SHARPNESS
Select	COLOUR TEMP. STD	COLOURTEMP.STD COLOURTEMP.COOL	COLOUR TEMP. STD

Helpful Hint

^{1.} By pushing the normal "N" button on the Remote Control while the Picture menu is displayed, the setting of the selected function will be return to factory setting level.

Sound Menu Operation



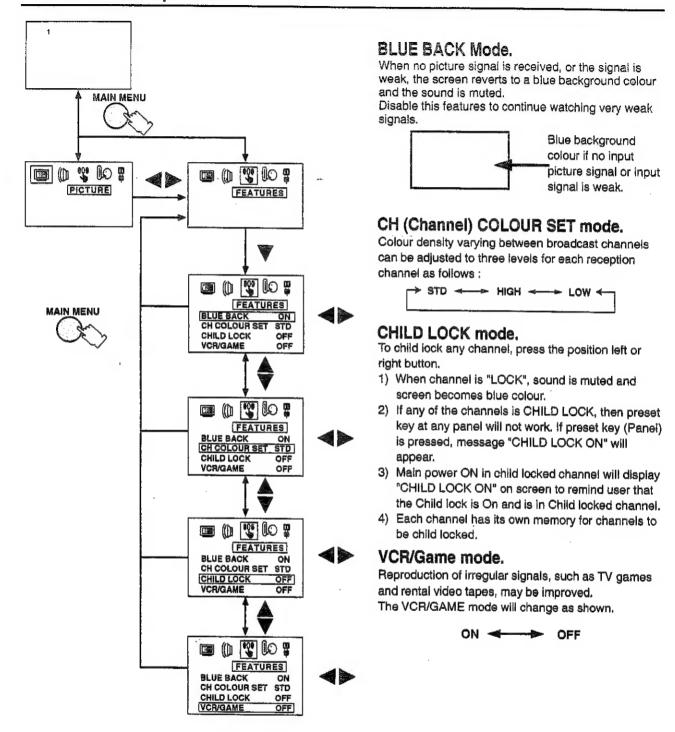
Sound Menu

Push	Item	Effect	Indicator
Select	TONE	Less More	& 24 TONE

Helpful Hint

1. By pushing the normal "N" button on the Remote Control while the Sound menu is displayed, the setting of Tone function will be return to factory setting level.

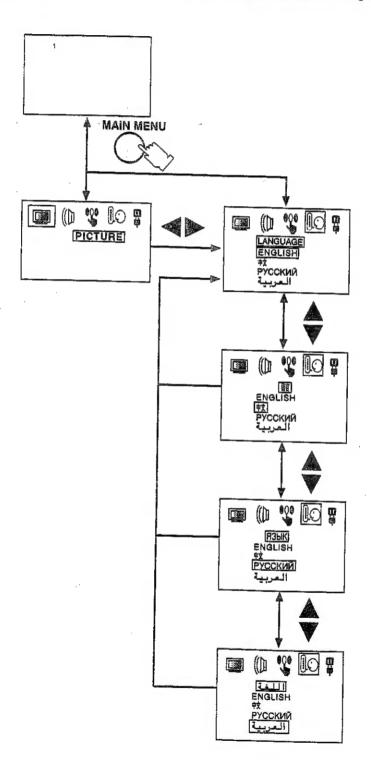
Features Menu Operation



Language Menu Operation

Language Menu

Press the "Position Up or Down" button. The on-screen language display will change as follows:



Troubleshooting

Before calling for service, determine the symptoms and make a few simple checks as shown below.

Symptoms Picture Sound		Checks	
Multiple Image	Normal Sound	Aerial Location, direction Connection	
Interference	Noisy Sound	Electrical Appliances Cars / Motorcycles Fluorescent Lamps	
Normal Picture	No Sound	Volume (Check whether the mute function has been activated on the Remote Control.)	
? No Picture	No Sound	Not plugged into AC outlet Not switched on Contrast and Brightness / Volume Setting (Check by pushing the Power Switch or Stand-by Button on the Remote Control.)	
No Colour	Normal Sound	Colour Control	
Scrambled	Weak Sound	Re-tune Channels	
Colour Patches	Normal Sound	Magnetic interference from unshielded equipment. Receiver moved while "ON"	
No Colour	Noisy Sound	Sound System Colour System	

Specifications

Power Source : AC AUTO 110-240V, 50/60Hz

Power Consumption: 74W Receiving System: 17 SYSTEMS

	SYSTEMS	FUNCTION	
1. 2. 3. 4. 5. 6. 7.	PAL B,G,H PAL I PAL I,K SECAM B,G SECAM D. K. SECAM K1 NTSC M (NTSC 3.58 / 4.5MHz)	Reception of broadcast transmissions and playback from video cassette tape recorders.	
8. 9. 10. 11. 12. 13.	NTSC 4.43 / 5.5MHz NTSC 4.43 / 6.0MHz NTSC 4.43 / 6.5MHz NTSC 3.58 / 5.5MHz NTSC 3.58 / 6.0MHz NTSC 3.58 / 6.5MHz SECAM I	Playback from special VCR only.	
15. 16. 17.	PAL 60Hz / 5.5MHz PAL 60Hz / 6.0MHz PAL 60Hz / 6.5MHz	Playback from special Disc player and VCR only.	

Receiving Channels:

VHF BAND	UHF BAND	CATV
2-12 PAL/SECAM B,K1 0-12 PAL B (AUST.) 1-9 PAL B (N.Z.) 1-12 PAL/SECAM D 1-12 NTSC M (JAPAN) 2-13 NTSC M (U.S.A.)	21 - 69 PAL G,H,I / SECAM G,K,K1 28 - 69 PAL B (AUST.) 13 - 57 PAL D,K 13 - 62 NTSC M (JAPAN) 14 - 69 NTSC M (U.S.A.)	S1 – S20 (OSCAR) 1 – 125 (USA CATV) C13 – C49 (JAPAN) S21 - S41 (HYPER) Z1 - Z37 (CHINA) 5A, 9A (AUST.)

Tuning System: Frequency synthesizer Auto search tuning: 100 position.

Picture Tube : 51 cm, measured diagonally, 90° deflection.

Audio Output : 3.5 W

Aerial Impedance : 75 Ω Unbalanced coaxial. Remote Control Transmitter : TNQ4G0401

Battery : R6 (AA) \times 2

Dimension (W \times D \times H) : 508.× 475 \times 470 mm

Weight (Net): 23 kg

Note:

Design and Specifications are subject to change without notice.